# Fall 2014 Levee Maintenance Deficiency Summary Report Overall LMA & Unit Ratings, including DWR Erosion Survey

# San Joaquin River Basin

RD2062 Reclamation District No. 2062 Stewart	Overall LMA Rating	Total LMA Miles	however, U	Threshold Perce Rated Miles are p				
	M *	12.14	Rating is M instead of A.					
Rated Item		Maintena	nce Deficiancy		Enforc	ement		& System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee			I					
Animal Control	0.01		0.01	0.08%				
Erosion / Bank Caving	0.02		0.02	0.17%				
Supplemental  DWR Erosion Survey	0.03	0.20	0.83	6.84%				
DWR UCIP Field Study	0.00	0.20	0.00	0.0170	0.13	0.03		
LMA Totals:	0.06	0.20	0.86	7.08% *	0.13	0.03	0.00	0.00
Unit No. 01 San Joaquin River LB	Overall Unit	Total Unit	0.00	110070	00	0.00	0.00	0.00
Onit No. 01 San Joaquin River LB	Rating	Miles						
RD2062	A	2.64						
			nce Deficiancy		Enforc	ement		& System
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Animal Control	0.01		0.01	0.38%				
Supplemental  DWR UCIP Field Study					0.03			
Unit Totals:	0.01	0.00	0.01	0.38%	0.03	0.00	0.00	0.00
Unit No. 02 Paradise Cut RB	Overall Unit	Total Unit			1			
ome No. 52 Faradise out NB	Rating	Miles						
RD2062	Α	3.96						
		Maintena	nce Deficiancy		Enforc	ement		& System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Erosion / Bank Caving	0.01		0.01	0.25%				
Supplemental  DWR UCIP Field Study	I				0.06	0.02		
Unit Totals:	0.01	0.00	0.01	0.25%	0.06	0.02	0.00	0.00
Om rotals.	0.01	0.00	0.01	0.2370	0.00	0.02	0.00	0.00
Unit No. 03 Old River LB	Overall Unit Rating	Total Unit Miles						
RD2062	M	5.55						
		Maintena	nce Deficiancy		Enforc	ement		& System scence
Rated Item	M Miles	U Miles	M + 4U Miles	Threshold %	M Miles	U Miles	M Miles	U Miles
Earthen Levee								
Erosion / Bank Caving	0.01		0.01	0.18%				
Supplemental DWB Freeign Survey	0.00	0.00	0.00	44.000/				
DWR LICID Field Study	0.03	0.20	0.83	14.96%	0.04	0.04		
DWR UCIP Field Study	0.04	0.20	0.94	15 1 10/	0.04	0.01	0.00	0.00
Unit Totals:	0.04	0.20	0.84	15.14%	0.04	0.01	0.00	0.00

# **LMA District Cover Sheet**

# Fall 2014 Levee Inspection Results

# **Reclamation District No. 2062 Stewart**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)							
* Overall LMA Rating (Fall Only)			M								
** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating											
* SPRING INSPECTIONS: Overall maintenance deficiencies are rated	ratings are not determ			ual maintenance							

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified

within the attached unit inspection reports. This rating is not intended to be an indiction of risk.

Commonto.		
Comments		

# **Unit Cover Sheet**

# Fall 2014 Levee Inspection Results

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles
Unit No. 01 San Joaquin River	Left	2.64

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	05/22/2014 - 05/22/2014		11/21/2014 - 11/21/2014	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By	Michael Moncrief MBK Engineers		Michael Moncrief MBK Engineers	
	Paul Gomes		Lin Hale RD2062	

#### Summer & Winter Inspections -

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start		Rating **	Α	Issue No.		2	_
LM End		Issue Type +	Ма	Location *	WS		_
Category	Earthen L	evee	GPS Latitude/Longitude				
Calegory				Start		End	
Item		Operations & Maintenance			٥		0
пеш	Manuals				0		0
DWR ID	DWR_RD2	062_01_f _ 201	3_2				
		Action/	Comme	nts			
Inspector office.	Comments	: The O&M M	anaual i	s available a	at th	e LMA's	

No Photos

Rating \*\* Issue No. LM Start Α 5 Issue Type + Location \* WS Ma LM End Earthen Levee GPS Latitude/Longitude Category Start End **Emergency Supplies &** Item Equipment DWR ID DWR RD2062 01 s 2013 5 Action/Comments

No Photos

Inspector Comments: Adequate flood fight supplies are available onsite.

LM Start		Rating **	Α	Issue No.		8	
LM End		Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	le/Longitude	
Category		Sta		Start		End	
Item	Flood Pre	paredness &	Training		0		0
пеш					0		0
DWR ID	DWR_RD2	062_01_s _ 201	13_8				
		Action/	Comme	nts			

No Photos

Inspector Comments: The LMA has a flood fight emergency response plan.

N/A: Not Applicable WS : Water Side

A : Acceptable M : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.91	Rating **	С	Issue No.		7	
LM End	0.91	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory				Start		End	
Item	DWR Ero	sion Survey		37.80408	30 °	37.804080	0
пеш				-121.31406	60°	-121.314060	0
DWR ID							

Action/Comments

Inspector Comments: 6/19/2014: No significant change observed. 08/13/2013. This was repaired prior to the boat survey. No new erosion found at the site

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed at the site. There is vegetation on the slope. There is a bridge construction site just upstream of the erosion. The impact of the construction may need to be monitored.

09/07/2010: No significant change observed on site. Sloughing of the existing rip rap revetment on the lower slope has developed into an erosion pocket. There is moderate annual grass growth on the slope. 08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: Per Michael Moncrief of MBK, site is scheduled for repair this year.

2009: Landside ground surface has been raised to the height of the levee crown; sloughing of the existing rip rap revetment on the lower slope that has created a pocket, exposing underlying soil; Site # is the same RM54.34,LM1.08; previously rated "M".

2006: Previously marked with stake. [2014 Site

ID:RD2062U01RM54.14]

LM Start	1.67	Rating **	М	Issue No.	1	
LM End	1.67	Issue Type +	En	Location *	WS	
Category	Supplemental			GPS Latitude/Longitude		
Category				Start		End
Item	DWR UC	P Field Study		37.7935	21 °	37.793521 °
пеш	em		-121.3153	48 °	-121.315348 °	
DWR ID	DWR_RD2	062_01_f _ 201	4_1			

Action/Comments

Inspector Comments: FS\_ID:22807

EP\_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new.Pumps, pump house, and pipes removed from waterside Land development activities going on in this area. Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD\_STRUCT\_DESC: 1 of 3: Two 16-inch steel pipes, one 8-inch steel pipe, and three electric conduits through the levee 5.0 feet below the crown. Two slant pumps in the pump house on the waterward

slope. Siphon breakers on the landward slope. (App. No. 16124)

FS Date: 10/22/2013

No Photos

No Photos

Location LS : Land Side N/A: Not Applicable WS: Water Side

A: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type Ma: Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.67	Rating **	М	Issue No.		3	
LM End	1.67	Issue Type +	En	Location *		WS	
Category			GPS Latitude/Longitude				
Calegory			Start		End		
Item	DWR UC	DWR UCIP Field Study			10 °	37.793510	0
пеш			-121.3153	45 °	-121.315345	0	
DWR ID	DWR_RD2	062_01_f _ 201	4_3				
			_				

Action/Comments

Inspector Comments: FS\_ID:22809

EP\_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new.Pumps, pump house, and pipes removed from waterside Land development activities going on in this area. Needs to confirm from LMA or DWR Inspector about the crossing.

FIELD\_STRUCT\_DESC: 2 of 3: Two 16-inch steel pipes, one 8-inch steel pipe, and three electric conduits through the levee 5.0 feet below the crown. Two slant pumps in the pump house on the waterward slope. Siphon breakers on the landward slope. (App. No. 16124)

FS Date: 10/22/2013

LM Start	1.67	Rating **	М	Issue No.	4			
LM End	1.67	Issue Type +	En	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory				Start		End		
Item	DWR UCIP Field Study			37.79349	7 °	37.793497	٥	
пеш				-121.31534	0 °	-121.315340	0	
DWR ID	DWR_RD2062_01_f _ 2014_4							
Action/Comments								

Inspector Comments: FS\_ID:22810

EP\_NO: 12679

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - All 3 pipes on landside looks new. No pump associated with 8-inch pipe. Pumps, pump house, and pipes removed from waterside Land development activities going on in this area. Needs to confirm from LMA or DWR Inspector about the crossing

FIELD\_STRUCT\_DESC: 3 of 3: one 8-inch pipe, two 16-inch pipes, and three electric conduits through the levee 8.0 feet below the crown. Two slant pumps in the pump house on the waterward slope. Siphon breakers on the landward slope. Installed by the United States Army Corps of Engineers, 1961. (App. No. 12679)

FS Date: 10/22/2013

No Photos

No Photos

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

A/W: Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.83	Rating **	С	Issue No.	No. 11		
LM End	1.83	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS La	tituc	le/Longitude		
			Start		End		
Item	Animal Co	ontrol		37.79187	'3 °	37.791873 °	
пеш				-121.31335	60°	-121.313350 °	
DWR ID	DWR_RD2	2_11					
	Action/Comments						

No rodents visible, but rodent burrows visible; need to backfill and

compact or grout burrows.

Rating \*\* Issue No. LM Start 1.84 С 16 Location \* WS Issue Type + Ma LM End 1.84 Earthen Levee GPS Latitude/Longitude Category Start End **Animal Control** 37.791887° 37.791887° Item -121.313178 ° -121.313178 ° DWR ID DWR RD2062 01 s 2012 16 Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

No Photos

LM Start	1.85	Rating **	М	Issue No.		12	
LM End	1.85	Issue Type +	Ма	Location *		WS	
Category Earthen Levee			GPS Latitude/Longitude				
Calegory		Start		End			
Item	Animal Co	ontrol		37.79179	8 °	37.791798	0
пеш			-121.31290	4 °	-121.312904	0	
DWR ID	DWR_RD2	062_01_s _ 201	2_12				
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Photo 1 of 1: FA\_2014\_RD2062\_309\_12\_20141001\_00005.jpg



View of a rodent hole on the waterside levee slope.

Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence N/A: Not Applicable LS: Land Side Acceptable N : Not Inspected/Rated WS : Water Side : Minimally Acceptable C : Corrected U : Unacceptable A/W: Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 San Joaquin River	Left	2.64	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.58	Rating **	Α	Issue No.	ue No. 6	
LM End	2.58	Issue Type +	Ма	Location *	WS	
Catagony	Category Earthen Levee			GPS Latitude/Longitude		
Calegory			Start		End	
Vegetation		37.788659 °		37.788659 °		
item				-121.30882	9°	-121.308829 °
DWR ID	DWR_RD2	062_01_f _ 201	4_6			
	Action/Comments					
Control an	nual grass	and weeds o	n the lev	ee slopes a	nd e	easements.



View of acceptable vegetation control.

# **Unit Cover Sheet**

# Fall 2014 Levee Inspection Results

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles
Unit No. 02 Paradise Cut	Right	3.96

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			Α	
Date of Inspection	05/22/2014 - 05/22/2014		11/21/2014 - 11/21/2014	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By	Michael Moncrief MBK Engineers		Michael Moncrief MBK Engineers	
	Paul Gomes RD2062		Lin Hale RD2062	

#### Summer & Winter Inspections -

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.58	Rating **	М	Issue No.		4	
LM End	0.58	Issue Type +	En	Location *	WS		
Category			GPS Latitude/Longitude				
Calegory		Start		End			
Item	DWR UCIP Field Study			37.78438	° 0	37.784380	٥
item				-121.33898	5 °	-121.338985	0
DWR ID	DWR_RD2	062_02_f _ 201	4_4				

Action/Comments

Inspector Comments: FS\_ID:23110

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: Found on field with the help of USACE 2012 PI

ReportNeeds proper abandonment.

FIELD\_STRUCT\_DESC: Abandoned 24-inch steel pipe through the levee. Damaged siphon breaker on waterside levee slope. Pump on concrete sump on landside. Service pole on landside levee slope.

Pump was disconnected from service pole.

FS Date: 10/23/2013

LM Start	0.77	Rating **	М	Issue No.		5	
LM End	0.77	Issue Type +	En	Location *	WS		
Category Supplemental			GPS Latitude/Longitude				
Calegory		Start		End			
Item	DWR UCIP Field Study			37.78613	°	37.786130	0
пеш				-121.34156	4 °	-121.341564	0
DWR ID	DWR_RD2	062_02_f _ 201	4_5				

Action/Comments

Inspector Comments: FS\_ID:23181

EP\_NO: 12427

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no siphon breaker foundevee toe erosion under walkway on waterside.erosion around concrete standpipe on

landside- may be base of the standpipe was leaking.

FIELD\_STRUCT\_DESC: 18-inch pipe through the levee 4.4 feet below the crown, pump house on the waterward slope, metal walkway from the pump house to the crown. Power pole on waterside. Flap gate and concrete distribution box on the landward slope. (App. No. 12427)

FS Date: 10/23/2013

No Photos

No Photos

U : Unacceptable

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.40	Rating **	М	Issue No.		6	
LM End	1.40	Issue Type +	En	Location *	ı* WS		
Category				GPS Latitude/Longitude			
Calegory	Category					End	
Item	DWR UC	P Field Study		37.79182°	0	37.791821	0
пеш				-121.350448	°	-121.350448	0
DWR ID	DWR_RD2	062_02_f _ 201	4_6				

Action/Comments

Inspector Comments: FS\_ID:23062

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pumphouse on concrete sump in the channel.

erosion under walkway on waterside.

FIELD\_STRUCT\_DEŚC: 20-inch pipe through the levee 8 feet below the crown. Pump house on the waterward slope and a metal walkway from the pump house to the crown. Flap gate, air vent, and concrete

distribution box on the landward slope.

FS Date: 10/22/2013

LM Start	1.67	Rating **	U	Issue No.		7
LM End	1.67	Issue Type +	En	Location *		WS
Category	Suppleme		GPS Latitude/Longitude			
Calegory			Start		End	
Item	DWR UC	P Field Study		37.79400	9 °	37.794009 °
iteiii				-121.35441	7 °	-121.354417 °
DWR ID	DWR_RD2	062_02_f _ 201	4_7			

Action/Comments

Inspector Comments: FS\_ID:23061

EP\_NO: 4305 Repair Type: Urgent Crossing Status: Found

UCIP Comments: - missing roof in pump house no protection for siphon breakerhuge erosion under pumphouse and levee slope on

waterside.

FIELD\_STRUCT\_DESC: 1 of 2: Two 18-inch pipes through the levee 4.8 feet below the crown. Pump house on the waterward slope. Siphon breaker on the landward shoulder. Power pole on the landward shoulder. Concrete distribution box at the toe of the landward slope.

(App. No. 4305) FS Date: 10/22/2013 No Photos

No Photos

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

1.67	Rating **	U	Issue No.		10			
1.67	Issue Type +	En	Location *	WS				
Category				GPS Latitude/Longitude				
			Start		End			
DWR UC	P Field Study		37.79401	4 °	37.794014	۰		
			-121.35443	4 °	-121.354434	۰		
DWR_RD2	062_02_f _ 201	4_10						
	1.67 Suppleme	1.67 Issue Type + Supplemental  DWR UCIP Field Study	1.67 Issue Type + En	1.67         Issue Type +         En         Location *           Supplemental         GPS Lati           Start         Start           DWR UCIP Field Study         37.794014           -121.354434	1.67         Issue Type +         En         Location *           Supplemental         GPS Latitud           Start         Start           DWR UCIP Field Study         37.794014 °           -121.354434 °	1.67         Issue Type +         En         Location *         WS           Supplemental         GPS Latitude/Longitude           Start         End           DWR UCIP Field Study         37.794014         °         37.794014           -121.354434         °         -121.354434		

No Photos

Action/Comments

Inspector Comments: FS\_ID:23059

EP\_NO: 4305 Repair Type: Urgent Crossing Status: Found

UCIP Comments: - missing roof in pump house no protection for siphon breakerhuge erosion under pumphouse and levee slope on

waterside.

FIELD\_STRUCT\_DESC: 2 of 2: Two 18-inch pipes through the levee 4.8 feet below the crown. Pump house on the waterward slope. Siphon breaker on the landward shoulder. Power pole on the landward shoulder. Concrete distribution box at the toe of the landward slope.

(App. No. 4305) FS Date: 10/22/2013

LM Start	2.04	Rating **	С	Issue No.	12		
LM End	2.04	Issue Type +	Ма	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Category	ory			Start		End	
Item	Animal Co	ontrol		37.797060	°	37.797060	0
пеш				-121.359929	°	-121.359929	0
DWR ID	DWR_RD2	062_02_s _ 201	2_12				

No Photos

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Burrow activity that appears to be active, no rodents seen.

LM Start	2.10	Rating **	С	Issue No.		18
LM End	2.10	Issue Type +	Ма	Location *	LS	
Category Earthen Levee				GPS Latitude/Longitude		
Calegory	Category		Start		End	
Item	Animal Co	ontrol		37.7975	58 °	37.797558 °
пеш				-121.3608	15 °	-121.360815 °
DWR ID	DWR_RD2	062_02_s _ 201	2_18			

No Photos

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Multiple large burrows, appears to be active.

\* Location

LS: Land Side N/A: Not Applicable

WS: Water Side

\* Rating

A: Acceptable

M: Minimally Acceptable

U: Unacceptable

N : Not Inspected/Rated C : Corrected + Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.19	Rating **	С	Issue No.	19		
LM End	2.19	Issue Type +	Ma	Location *	LS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Animal Co	ontrol		37.79830	)4 °	37.798304°	
item				-121.36213	8 °	-121.362138 °	
DWR ID DWR_RD2062_02_s _ 2012_19							
		A ation /	Camma	240			

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: Large single active burrow.

No Photos

LM Start	2.84	Rating **	Α	Issue No.		20		
LM End	2.84	Issue Type +	Ma	Location *	WS			
Category Earthen Levee				GPS Latitude/Longitude				
Calegory	у		Start		End			
Item	Vegetatio	n		37.803579	°	37.803579°		
пеш				-121.371538	°	-121.371538 °		
DWR ID DWR_RD2062_02_f _ 2014_20								
		A -4: /	C	-1-				

#### Action/Comments

Control annual grass and weeds on the levee slopes and easements.

# Photo 1 of 1 : FA\_2014\_RD2062\_310\_20\_20141124\_00022.jpg



View of acceptable vegetation control.

LM Start	2.89	Rating **	N	Issue No.	3				
LM End	2.89	Issue Type +	Ma	Location *	WS				
Catagory	Category Earthen Levee				GPS Latitude/Longitude				
Calegory				Start		End			
Item	Trim / Thi	n Trees		37.80382	7 °	37.803827 °			
item				-121.37242	4 °	-121.372424 °			
DWR ID	ID DWR_RD2062_02_s _ 2012_3								
	Action/Comments								

Tree stumps.

Inspector Comments: Three small tree stumps.



Three small stumps on levee slope.

\* Location
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable
N: Not Inspected/Rated
M: Ninimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.94	Rating **	N	Issue No.		13
LM End	2.94	Issue Type +	Ma	Location *	WS	
Catagonia Earthen Levee			GPS Latitude/Longitude			
Category		Start		End		
Item	Trim / Thi	n Trees		37.8040	60°	37.804060 °
item		-121.373245 °		45 °	-121.373245 °	
DWR ID DWR_RD2062_02_s _ 2012_13						
Action/Comments						

Tree stumps.
Inspector Comments: Four small oak stumps on levee slope.



View of tree stumps on waterside slope. 05/17/2012

LM Start	3.03	Rating **	N	Issue No.		14	
LM End	3.03	Issue Type +	Ма	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start	End		
Item	Trim / Thi	n Trees		37.8044	52 °	37.804452 °	
item				-121.3749	03 °	-121.374903 °	
DWR ID DWR_RD2062_02_s _ 2012_14							
	Action/Comments						

Tree stumps.

Photo 1 of	: FA_2014_RD2062_310_14_20141001_00008.jpg
	THE PARTY OF THE P



View of the tree stump in the middle of the photo.

LM Start	3.07	Rating **	N	Issue No. 15		15	
LM End	3.07	Issue Type +	Ma	Location *	WS		
Earthen Levee			GPS Latitude/Longitude				
Calegory	Category					End	
ltom	Trim / Thi	n Trees		37.8044	81 °	37.804481	0
пеш	Item			-121.3755	10 °	-121.375510	0
DWR ID DWR_RD2062_02_s _ 2012_15							
	Action/Comments						

Tree stumps.



View of the tree stumps on the waterside levee slope.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.27	Rating **	С	Issue No.		2	
LM End	3.28	Issue Type +	Ма	Location *	WS		
Supplemental			GPS Latitude/Longitude				
Calegory	Category			Start		End	
Item	DWR Ero	sion Survey		37.80460	4 °	37.804604	0
пеш				-121.37945	4 °	-121.379454	0
DWR ID							

No Photos

Action/Comments

Inspector Comments: 08/26/2014: The erosion was repaired.

08/28/2013: No significant change observed.

07/26/2012: Site was visited on 07/26/2012. No significant change

09/02/2011: No significant change observed on site from last visit. 09/22/2010: No significant change observed on site. The fencing located on the berm was removed. Levee slope and berm area 10 feet from the levee toe are bare of any vegetation. The 1- to 2 feet of nearvertical scarp on the levee toe is unchanged.

03/09/2010: As discussed with Michael Moncrief of MBK Engineer, the district will address the site this year.

7/27/2009: 1 to 2 feet of near-vertical scarp on the levee toe; damage was most likely caused by agricultural equipment during clearing or tilling operation; this is a maintenance-related issue. [2014 Site ID:RD2062U02RM2.14]

LM Start	3.30	Rating **	М	Issue No.		11		
LM End	3.30	Issue Type +	En	Location *	WS			
Supplemental				GPS Latitude/Longitude				
Calegory	Category			Start		End		
Item	DWR UC	P Field Study		37.8047	70°	37.804770 °		
item		-121.3796	79°	-121.379679 °				
DWR ID	DWR_RD2	062_02_f _ 201	4_11					

Action/Comments

Inspector Comments: FS\_ID:23304

EP\_NO: 11524 Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - waterside pipe immersed into channel water. most of the pipe on landside exposed and siphon breaker on waterside

not protected.

FIELD\_STRUCT\_DESC: 1 of 3: One of 2x24-inch pipes through the levee 2.0 feet below the crown. 18-inch pipe through the levee 4.0 feet below the crown. Siphon breakers on waterward slope. Pump on steel platform in drainage ditch, 350 ft. from levee center off the the landward

berm. (App. No. 11524) FS Date: 10/22/2013

No Photos

Location LS : Land Side N/A: Not Applicable WS : Water Side

A: Acceptable : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy

Ob : Design & System Obsolescence A/W: Acceptable but Monitor & Maintain En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.30	Rating **	М	Issue No.	16			
LM End	3.30	Issue Type +	En	Location *		WS		
Category				GPS Latitude/Longitude				
Category	Category			Start		End		
Item	DWR UC	IP Field Study		37.80477	7 °	37.804777	0	
пеш		-121.379704 °		-121.379704	0			
DWR ID	DWR_RD2	062_02_f _ 201	4_16					
	Action/Comments							

Action/Comments

Inspector Comments: FS\_ID:23023

EP\_NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - 18-inch pipe bifurcated near the pump and two gate valves installed waterside pipe immersed into channel watermost of the pipe on landside exposed and siphon breaker on waterside not

protected.

FIELD\_STRUCT\_DESC: 2 of 3: 18-inch pipe through the levee 4.0 feet below the crown. 2x24-inch pipes through the levee 2.0 feet below the crown. Siphon breakers on waterward slope. Pump on steel platform in drainage ditch, 350 ft. from levee center off the the landward berm.

(App. No. 11524) FS Date: 10/22/2013

LM Start	3.31	Rating **	М	Issue No.		17		
LM End	3.31	Issue Type +	En	Location *		WS		
Category Supplemental				GPS Latitude/Longitude				
Calegory				Start		End		
ltom	DWR UCI	P Field Study		37.80478	37 °	37.804787 °		
Item				-121.37973	34 °	-121.379734 °		
DWR ID	DWR_RD2	062_02_f _ 201	4_17					
			_					

Action/Comments

Inspector Comments: FS\_ID:23305

EP NO: 11524

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - no associated pump or any other appurtenances

found on landside looks abandoned pipe. Needs proper

abandonment.

FIELD\_STRUCT\_DESC: 3 of 3: One of 2x24-inch pipe through the levee 2.0 feet below the crown. 18-inch pipe through the levee 4.0 feet below the crown. Siphon breakers on waterward slope. (App. No. 11524)

FS Date: 10/22/2013

No Photos

No Photos

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.44	Rating **	С	Issue No.		1	
LM End	3.53	Issue Type +	Ма	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory	Calegory					End	
Item	DWR Erosion Survey			37.80542	2 °	37.805422	0
пеш				-121.38317	3 °	-121.383173	0
DWR ID							

No Photos

Action/Comments

Inspector Comments: 08/26/2014: The erosion was repaired.

08/28/2013: No significant change observed.

07/31/2012: Site was visited on 07/26/2012. No significant change

09/02/2011: No significant change observed.

09/22/2010: No significant change observed. The foot-high near-vertical scarp still exists on levee toe. There is little to no vegetation on the slope.

03/09/2010: As discussed with Michael Moncrief of MBK, site will be addressed this year.

07/27/2009: 1 to 2 feet of near-vertical scarp on levee toe; damage was most likely caused by farming equipment during clearing or tilling operation; this is a maintenance-related issue. [2014 Site ID:RD2062U02RM1.94]

LM Start	3.45	Rating **	С	Issue No.		41	
LM End	3.45	Issue Type +	Ma	Location *	LS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory		Start		End			
ltom	Trim / Thi	Trim / Thin Trees			55 °	37.805455 °	
item	-121.382235 ° -121.382235						
DWR ID DWR_RD2062_02_s _ 2012_41							
Action/Comments							

No Photos

Trim trees to at least five feet above ground level.

N/A: Not Applicable LS : Land Side

WS : Water Side

A : Acceptable M : Minimally A : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected

#### + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Paradise Cut	Right	3.96	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.68	Rating **	С	Issue No.		9	
LM End	3.68	Issue Type +	Ma	Location *	WS		
Category	Earthen Levee			GPS Latitude/Longitude			
Calegory	alegory			Start		End	
Item	Trim / Thi	Trim / Thin Trees			31 °	37.806231	0
пеш			-121.38620	)9°	-121.386209	0	
DWR ID DWR_RD2062_02_s _ 2012_9							
Action/Comments							
Tree stum	ps.						

No Photos

Rating \*\* Issue No. LM Start 3.71 M 8 Location \* WS Issue Type + Ma LM End 3.71 Earthen Levee GPS Latitude/Longitude Category Start End Erosion / Bank Caving 37.806347° 37.806347 ° Item -121.386692 ° -121.386692 DWR ID DWR RD2062 02 s 2014 8 Action/Comments

Schedule repair of erosion site prior to the next inspection.

Inspector Comments: Small stump on slope.



View of the erosion from surface runoff on the waterside levee slope.

# **Unit Cover Sheet**

# Fall 2014 Levee Inspection Results

## **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles
Unit No. 03 Old River	Left	5.55

	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)			M	
Date of Inspection	05/22/2014 - 05/22/2014		11/21/2014 - 11/21/2014	
DWR Inspector	Maksim Khashchuk		Maksim Khashchuk	
Accompanied By	Michael Moncrief MBK Engineers		Michael Moncrief MBK Engineers	
	Paul Gomes		Lin Hale RD2062	

#### Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

#### http://cdec.water.ca.gov/lma.html

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	-0.03	Rating **	U	Issue No.		1
LM End	0.07	Issue Type +	Ma	Location *	WS	
Category	Suppleme	ental		GPS Lat	itud	e/Longitude
Calegory	ny .			Start		End
Item	DWR Ero	DWR Erosion Survey			3°	37.809673 °
пеш				-121.39032	1 °	-121.390321 °
DWR ID						·

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: Site is at the upstream of a drainage ditch. [2014 Site ID:RD2062U03RM29.93]

Photo 1 of 1 : SJR20	14_RD2062U03RM29.93_1.jpg
2	
	C. Commercial Commerci
A CONTRACT OF THE PARTY OF THE	THE RESERVE OF THE PARTY OF THE
	attended to
	<b>小型和影響/香港</b>

Front view of the erosion.

LM Start	0.08	Rating **	N	Issue No.		3	
LM End	0.08	Issue Type +	Ма	Location *	WS		
Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End	
Item	Trim / Thin Trees			37.8097	27 °	37.809727 °	
пеш			-121.3891	00 °	-121.389100 °		
DWR ID DWR_RD2062_03_f _ 2012_3							
	Action/Comments						

Tree stumps.

#### Photo 1 of 1: FA\_2014\_RD2062\_311\_3\_20141001\_00003.jpg



View of tree stumps on waterside slope.

LM Start	0.10	Rating **	U	Issue No.		2	
LM End	0.11	Issue Type +	Ma	Location *	WS		
Category	Supplemental			GPS Latitude/Longitude			
Calegory	ategory			Start		End	
Item	DWR Erosion Survey			37.8100	52 °	37.810052 °	
пеш				-121.38884	47 °	-121.388847 °	
DWR ID							
Action/Comments							

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: Hard to view the erosion because of the dense vegetation and trees on site. The site is under the bush, close to the tree. [2014 Site ID:RD2062U03RM30.02]



Front view of the site.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.17	Rating **	N	Issue No.		6	
LM End	0.17	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	e/Longitude		
Calegory				Start		End	
Item	Trim / Thin Trees		37.810194 °		37.810194 °		
item				-121.3876	)2 °	-121.387602 °	
DWR ID	DWR_RD2	062_03_s _ 201	12_6				
Action/Comments							
Tree stum	Tree stumps.						

No Photos

LM Start	0.18	Rating **	М	Issue No.	4		
LM End	0.18	Issue Type +	Ma	Location *	WS		
Supplemental Supplemental			GPS Latitude/Longitude				
Category				Start		End	
Item	DWR Ero	sion Survey		37.8104	68 °	37.810468 °	
пеш				-121.3874	92 °	-121.387492 °	
DWR ID							
	Action/Comments						

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The protection at the levee toe has been washed away. [2014 Site ID:RD2062U03RM30.1]

# Photo 1 of 1 : SJR2014\_RD2062U03RM30.1\_1.jpg

Direct view of the site.

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.23	Rating **	U	Issue No.		5
LM End	0.32	Issue Type +	Ма	Location *		WS
Category	Suppleme	ental		GPS Latitude/Longitude		
Calegory				Start	Start	
Item	DWR Ero	sion Survey		37.81060	9 °	37.810609 °
пеш				-121.38587	9 °	-121.385879 °
DWR ID						

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: A new pocket erosion at the upper levee slope has been found directly above a large tree. The erosion might have been caused by internal pipe leakage or surface runoff.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site. Dense vegetation is visible along the water line.

09/07/2010: No significant change observed on site. Much of the upper slope was recently cleared of vegetation by spraying. 4- to 6-foot vertical scarp and pocket erosions are lined along a span of 475 feet. In some sections, the vertical scarp encroaches into the levee prism. There is a lack of berm along this reach, exposing the levee slope to high flow velocities during normal and flood events.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineers, the site will be 'addressed' later this year.

09/29/2009: No major change observed since last visit; pocket erosion and a vertical scarp forming; this site was combined with Site RM30.13 and 30.02 with a combined total erosion length of 475 feet; recommended as annual assessment and monitoring of the site, per CLRO CES Evaluation 2008 Report; previously rated "M".

11/05/2008: Top of vertical scarp has rip rap that appears to be sliding; rodent holes; existing toe rip rap. [2014 Site ID:RD2062U03RM30.19]



Front view of the site with dense vegetation.

LM Start	0.35	Rating **	М	Issue No.		8		
LM End	0.35	Issue Type +	Ma	Location *	WS			
Category				GPS Latitude/Longitude				
Calegory			Start		End			
Item	DWR Ero	sion Survey		37.8112	81 °	37.811281 °		
пеш				-121.3844	61 °	-121.384461 °		
DWR ID								
	Action/Comments							

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: The site is right at the downstream of a river bend. [2014 Site ID:RD2062U03RM30.27]



Front view of the erosion.

\*\* Rating
LS: Land Side N/A: Not Applicable
WS: Water Side
CR: Crown

\*\* Rating
A: Acceptable N: Not Inspected/Rated
M: Minimally Acceptable
C: Corrected
M: Minimally Acceptable
U: Unacceptable
A/W: Acceptable but Monitor & Maintain

\*\* Rating
A: Issue Type
Ma: Maintenance Deficiancy
Ob: Design & System Obsolescence
En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.52	Rating **	U	Issue No.	24		
LM End	0.52	Issue Type +	En	Location *		WS	
Supplemental			GPS Latitude/Longitude				
Calegory				Start		End	
Item	DWR UCI	P Field Study		37.81257	'5 °	37.812575	0
пеш				-121.38279	8 °	-121.382798	0
DWR ID	DWR_RD2	062_03_f _ 201	4_24				

Action/Comments

Inspector Comments: FS\_ID:23306

EP\_NO: 2029 Repair Type: Urgent Crossing Status: Found

UCIP Comments: - pits and holes on overflow pipe on waterside. underpinning at pump support.slope erosion on both sides of the levee 2-inch electric conduit on waterside and power pole on landside.

FIELD\_STRUCT\_DESC: 16-inch pipe through the levee 8 feet below the crown, siphon breaker on the landward slope. Pump house on the waterward slope. Distribution box on the landside. (App. No. 2029)

FS Date: 10/22/2013

LM Start	0.56	Rating **	М	Issue No.		9
LM End	0.57	Issue Type +	Ма	Location *		WS
Category			GPS Latitude/Longitude			
Calegory	y			Start		End
Item	DWR Ero	sion Survey		37.8130	o°	37.813070 °
item				-121.38310	00°	-121.383100 °
DWR ID						

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed.

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the placed rip rap revetment has slid. It is no longer adequately protecting the slope.

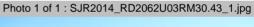
08/06/2010: Recommended as local maintenance issue, per CLRO Report.

03/09/2010: As discussed with Michael Moncrief of MBK, site will be 'addressed' this year.

09/29/2009: No major change observed since last visit; a section of the rip rap has slipped, exposing a levee section that has eroded; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM30.43,LM0.63; previously rated "U".

11/05/2008: Site is located inside of a bend; scarp looks to be into the levee prism; piles of concrete chunks placed on the slope, with some of them already starting to slide. [2014 Site ID:RD2062U03RM30.43]

No Photos





Front view of the site. Rip rap no longer adequately protecting levee slope.

\* Location

LS: Land Side N/A: Not Applicable WS: Water Side

\*\* Rating

A : Acceptable
M : Minimally Acceptable
U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type Ma : Mainter

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence
En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.61	Rating **	N	Issue No.	10		
LM End	0.61	Issue Type +	Ma	Location *	WS		
Category Earthen Levee			GPS Latitude/Longitude				
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.8135	70 °	37.813570	0
item				-121.3820	94 °	-121.382094	0
DWR ID DWR_RD2062_03_s _ 2012_10							
		Action/	Comme	nts			

Tree stumps.

Inspector Comments: Stump in slope.



05/11/2011 Stump in slope, new growth in center of photo is at the location of the stump.

Photo 1 of 1: FA\_2014\_RD2062\_311\_12\_20141001\_00012.jpg

LM Start	0.65	Rating **	N	Issue No.		12
LM End	0.65	Issue Type +	Ма	Location *	WS	
Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End
Item	Trim / Thi	n Trees		37.8138	94 °	37.813894°
item				-121.3816	80°	-121.381680 °
DWR ID DWR_RD2062_03_s _ 2012_12						
		Action/	Comme	nts		

Tree stumps.

Inspector Comments: 2 stumps on waterside slope.



View of the tree stumps on the waterside levee slope.

LM Start	0.82	Rating **	A/W	Issue No.		11	
LM End	0.82	Issue Type +	Ma	Location *	WS		
Category	Earthen L	GPS Latitude/Longitude					
Calegory				Start		End	
Item	Erosion / Bank Caving			37.81631	15 °	37.816315°	
item				-121.38158	37 °	-121.381587 °	
DWR ID	DWR_RD2	062_03_s _ 201	12_11				
Action/Comments							

Schedule repair of erosion site prior to the next inspection.
Inspector Comments: Cracking developing along the waterside levee hinge.



View of cracking at waterside levee hinge.

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	0.82	Rating **	A/W	Issue No.	11 (cont)	
LM End	0.82	Issue Type +	Ma	Location *	WS	
Category	Earthen L	GPS Latitude/Longitude				
				Start		End
Item	Erosion / Bank Caving			37.8163	15 °	37.816315 °
пеш				-121.3815	37 °	-121.381587 °
DWR ID	DWR_RD2062_03_s _ 2012_11					
Action/Comments						

Schedule repair of erosion site prior to the next inspection.

Inspector Comments: Cracking developing along the waterside levee hinge.





View of slope erosion from foot traffic.

LM Start	1.20 Rating **		U	Issue No.		13	
LM End	1.21	Issue Type +	Ма	Location *		WS	
Catagory	Suppleme	ental		GPS La	tituc	le/Longitude	
Category		Start		End			
ltom	DWR Ero	sion Survey		37.81929	° 00	37.819290 °	
Item				-121.37888	° 08	-121.378880	
DWR ID						·	

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. Much of the seasonal grass along the slope was cleared. Site consists of an existing scalloped erosion approximately 30 feet long by 5 feet wide at its widest opening. The lateral crack is extended outwards along the middle slope. There is a 1 to 2 feet of differential settlement that could further develop into a shallow slide.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' this year.

09/28/2009: No major change observed; section of rip rap has slipped, creating a terraced effect; dense vegetation growth; recommended as a local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.12,LM1.25; previously rated "U" 09/14/2006: 1-2' into prism. [2014 Site ID:RD2062U03RM31.12]

Photo 1 of 1: SJR2014 RD2062U03RM31.12 1.jpg



Front view of the site.

Location LS: Land Side N/A: Not Applicable WS : Water Side

Acceptable Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.37 Rating ** A/W Issue No.		18				
LM End	1.37	Issue Type +	Ma	Location *	WS		
Cotogony	Earthen L	GPS Latitude/Longitude					
Category				Start		End	
Item	Vegetation			37.8208	85 °	37.820885	0
item				-121.3769	86 °	-121.376986	0
DWR ID	DWR_RD2062_03_s _ 2012_18						
Action/Comments							

Elderberries are blocking visibility and flood fight capability. Inspector Comments: Elderberry bush blocks visibility.

# Photo 1 of 1 : FA\_2014\_RD2062\_311\_18\_20141001\_00015.jpg



05/11/2011 Elderberry bush on water side slope.

LM Start	1.42 Rating **		U	Issue No.		20	
LM End	1.43	Issue Type +	Ма	Location *		WS	
Catagory	Suppleme	ental		GPS La	titud	le/Longitude	
Category		Start		End			
Itom	DWR Ero	sion Survey		37.8213	80 °	37.821380	0
Item				-121.3769	00°	-121.376900	0
DWR ID							

#### Action/Comments

Inspector Comments: 07/02/2014: No significant change observed. 08/13/2013: No significant change observed.

08/07/2012: The site has been visited by boat survey. No significant change observed

08/23/2011: No significant change observed on site.

09/07/2010: No significant change observed on site. There is a small-to medium sized Oak tree on the mid-slope just above rip rap. Some of the rip rap has collapsed, creating a pocket erosion just above the existing toe rip rap and upstream of the Oak tree.

08/06/2010: Recommended as local maintenance issue, per CLRO. 03/09/2010: As discussed with Michael Moncrief of MBK Engineer, site will be 'addressed' in 2010.

09/29/2009: No major change since last visit; sliding of the rip rap at the base of the lone tree; there is noticeable man-made trail and foot traffic extending from the crown to the toe; much of the broken concrete used as temporary rip rap has slid, exposing portion of the bare levee slope; recommended as local maintenance issue, per CLRO CES Evaluation 2008 Report; Site # is the same as RM31.3, LM1.45; previously rated "M".

11/05/2008: Portion of rip rap collapsing.

09/14/2006: Portion of rip rap along the slope has collapsed; exposed levee section is starting to erode, exposing roots from the nearby tree. [2014 Site ID:RD2062U03RM31.28]



Front view of the site.

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	1.52	Rating **	N	Issue No.	14		
LM End	1.52	Issue Type +	Ma	Location *	WS		
Category	Earthen L	GPS Latitude/Longitude					
				Start		End	
Item	Trim / Thin Trees			37.82138	в°	37.821388 °	
пеш					7 °	-121.374947 °	
DWR ID	DWR_RD2062_03_s _ 2012_14						
Action/Comments							
Tue4							

Tree stumps.

No Photos

							_
LM Start	1.67 Rating ** N		N	Issue No.		15	
LM End	1.67	Issue Type +	Ma	Location *		WS	
Category	Earthen L	evee		GPS La	atitud	e/Longitude	
				Start		End	
Item	Trim / Thi	n Trees		37.8208	90 °	37.820890	0
item				-121.3722	27 °	-121.372227	0
DWR ID	DWR_RD2062_03_s _ 2012_15						

Action/Comments

Tree stumps.

# Photo 1 of 1: FA\_2014\_RD2062\_311\_15\_20141001\_00014.jpg



View of the tree stump on the waterside levee slope.

	LM Start	1.78	Rating **	N	Issue No.	16		
	LM End	1.78	Issue Type +	Ma	Location *		WS	
	Category	Earthen L	GPS Latitude/Longitude					
	Calegory				Start		End	
	Item	Trim / Thin Trees			37.8209	02 °	37.820902	0
					-121.3705	65 °	-121.370565	0
	DWR ID	DWR_RD2	062_03_s _ 201	12_16				
	Action/Comments							

Tree stumps.

No Photos

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	2.15	Rating **	A/W	Issue No.	19	
LM End	2.15	Issue Type +	Ма	Location *	WS	
Catagony	Category Earthen Levee			GPS La	e/Longitude	
Calegory				Start		End
Item	Encroach	ments		37.8186	45 °	37.818645 °
item			-121.3648	94 °	-121.364894 °	
DWR ID	DWR_RD2	2_19				
Action/Comments						

Pipe

Inspector Comments: Irrigation intake.



View of the pump house on the waterside levee slope.

LM Start	2.81	Rating **	М	Issue No.		27	
LM End	2.81	Issue Type +	En	Location *		WS	
Category	ental	GPS Latitude/Longitude					
Calegory				Start		End	
Item	DWR UCIP Field Study			37.81636	2 °	37.816362	0
пеш					4 °	-121.354334	0
DWR ID	DWR_RD2062_03_f _ 2014_27						

Action/Comments

Inspector Comments: FS\_ID:23312 EP\_NO: 2505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pumphouse roof missing siphon breaker buried by dirt in CMP riser2.25 inch electric conduit and power pole on landside.

FIELD\_STRUCT\_DESC: 1 of 2: 14-inch and 16-inch pipe through the levee 6.5 feet below the crown, pump in pump house on pile structure in stream. Timber walkway to the pump. Siphon breakers in CM risers on the landward slope. Concrete distribution box at the toe of the landward slope. Timber bulkhead and slab on the waterward slope. Timber bulkhead and slab on the waterward slope. Installed by the United States Army Corps of Engineers, 1963. (App. No. 2505) FS Date: 10/22/2013

No Photos

U : Unacceptable

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start 2.81 Rating \*\* Μ Issue No. 29 Issue Type + Location \* WS LM End 2.81 En Supplemental GPS Latitude/Longitude Category Start End DWR UCIP Field Study 37.816362 ° 37.816362 Item -121.354339° -121.354339° DWR ID DWR\_RD2062\_03\_f \_ 2014\_29

No Photos

Action/Comments

Inspector Comments: FS\_ID:23311

EP\_NO: 2505

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - pumphouse roof missing.siphon breaker buried by dirt in CMP riser.2.25 inch electric conduit and power pole on

landside.

FIELD\_STRUCT\_DESC: 2 of 2: 16-inch and 14-inch pipe through the levee 6.5 feet below the crown, pump in pump house on pile structure in stream. Timber walkway to the pump. Siphon breakers in CM risers on the landward slope. Concrete distribution box at the toe of the

landward slope. (App. No. 2505)

FS Date: 10/22/2013

LM Start	2.83	Rating **	N	Issue No.		22		
LM End	2.83	Issue Type +	Ма	Location *	WS			
Category	evee	GPS Latitude/Longitude						
Category				Start				
Item	Trim / Thi	n Trees		37.81634	1°	37.816341 °		
пеш			-121.35400	8 °	-121.354008 °			
DWR ID	DWR_RD2	062_03_s _ 201	2_22					

Action/Comments

No Photos

Tree stumps.

LM Start	2.90	Rating **	N	Issue No.		23		
LM End	2.90	Issue Type +	Ma	Location *	WS			
Category	Category Earthen Levee				GPS Latitude/Longitude			
Calegory				Start		End		
Item	Trim / Thi	n Trees		37.81633	30 °	37.816330	0	
itein				-121.35277	75 °	-121.352775	0	
DWR ID	DWR_RD2	062_03_s _ 201	12_23					
Action/Comments								

No Photos

Tree stumps.

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.07	Rating **	N	Issue No.	25		
LM End	3.07	Issue Type +	Ма	Location *	WS		
Catagony	Category Earthen Levee			GPS Latitude/Longitude			
Calegory				Start		End	
Trim / Thin T		n Trees		37.81779	1°	37.817791 °	
Item				-121.35008	8 °	-121.350088 °	
DWR ID	WR ID DWR_RD2062_03_s _ 2012_25						
	Action/Comments						

Tree stumps.

No Photos

LM Start	3.14	Rating **	N	Issue No.		26
LM End	3.14	Issue Type +	Ma	Location *		WS
Category	Earthen L	evee		GPS La	atitud	e/Longitude
Calegory				Start		End
Item	Trim / Thi	n Trees		37.8185	32 °	37.818532 °
пеш				-121.3495	10 °	-121.349510 °
DWR ID	DWR_RD2062_03_s _ 2012_26					
		Action/	Comme	nts		

Tree stumps.

# Photo 1 of 1: FA\_2014\_RD2062\_311\_26\_20141124\_00027.jpg



View of the tree stump on the waterside levee slope.

LM Start	3.28	Rating **	A/W	Issue No.		21
LM End	3.28	Issue Type +	Ма	Location *	WS	
Category Earthen Levee				GPS Latitude/Longitude		
Calegory				Start		End
Item	Animal Co	ontrol		37.82010	66°	37.820166 °
пеш				-121.3480	77 °	-121.348077 °
DWR ID	DWR_RD2	062_03_s _ 201	4_21			

Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

Inspector Comments: LMA is actively controlling rodent population and is scheduling to backfill the holes prior to fall inspection.



View of the rodent holes on the waterside levee slope.

\* Location + Issue Type Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence LS : Land Side N/A: Not Applicable A : Acceptable M : Minimally Acceptable N : Not Inspected/Rated WS : Water Side C : Corrected A/W : Acceptable but Monitor & Maintain U : Unacceptable En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	3.44	Rating **	С	Issue No.		28			
LM End	3.44	Issue Type +	Ma	Location *		WS			
Category	Earthen Levee				GPS Latitude/Longitude				
Category				Start		End			
Item	Trim / Thi	n Trees		37.8191	72 °	37.819172	0		
пеш				-121.3457	60 °	-121.345760	0		
DWR ID	DWR_RD2	062_03_s _ 201	12_28						
	Action/Comments								

Tree stumps.

No Photos

Rating \*\* Issue No. LM Start 3.80 С 53 WS Issue Type + Ma Location \* LM End 3.80 Earthen Levee GPS Latitude/Longitude Category Start End Trim / Thin Trees 37.817160° 37.817160° Item -121.340933 ° -121.340933 ° DWR RD2062 03 s 2012 53 DWR ID Action/Comments

Thin trees to allow visibility of the ground and room to flood fight. Inspector Comments: Beaver damaged a tree; remove from slope. No Photos

Rating \*\* Issue No. LM Start 4.18 С 32 LM End 4.18 Issue Type + Ma Location \* WS Earthen Levee GPS Latitude/Longitude Category Start End Animal Control 37.820688 37.820688 ° Item -121.338483 -121.338483 ° DWR ID DWR\_RD2062\_03\_s \_ 2014\_32 Action/Comments

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

\* Location LS : Land Side

N/A: Not Applicable

WS : Water Side

A : Acceptable M : Minimally A : Minimally Acceptable U : Unacceptable

N : Not Inspected/Rated

C : Corrected A/W: Acceptable but Monitor & Maintain + Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence

En: Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	4.20	Rating **	N	Issue No.	33		
LM End	4.20	Issue Type +	Ma	Location *	WS		
Category Earthen Levee				GPS La	titud	e/Longitude	
Calegory				Start		End	
Item	Trim / Thi	n Trees		37.8204	)7°	37.820407	0
item				-121.3381	22 °	-121.338122	0
DWR ID	DWR_RD2	062_03_s _ 201					
Action/Comments							

Tree stumps.

No Photos

LM Start	4.51	Rating **	С	Issue No.	17		
LM End	4.51	Issue Type +	Ма	Location *	LS		
Category Earthen Levee			GPS La	titud	le/Longitude		
Category			Start		End		
Item	Animal Co	ontrol		37.8180	27 °	37.818027	0
item				-121.3336	12 °	-121.333612	0
DWR ID DWR_RD2062_03_f _ 2012_17							
Action/Comments							

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start	4.82	Rating **	N	Issue No.	7		
LM End	4.82	Issue Type +	Ma	Location *	LS		
Earthen Levee			GPS La	atitud	le/Longitude		
Category				Start		End	
Item	Trim / Thi	n Trees		37.8139	86 °	37.813986	
пеш				-121.3358	21 °	-121.335821	
DWR ID DWR_RD2062_03_s _ 2012_7							
	Action/Comments						

Tree stumps.

Inspector Comments: 14" stump on landside slope.



10/21/2011 Photo taken the next day. Stump can be seen in the lower center of the photo.

\*Location

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

\*\* Rating

A : Acceptable
N : Not Inspected/Rated
M : Maintenance Deficiancy
Ob : Design & System Obsolescence
U : Unacceptable
A/W : Acceptable but Monitor & Maintain
En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	4.83	Rating **	С	Issue No.	43		
LM End	4.83	Issue Type +	Ма	Location *	WS		
Earthen Levee				GPS Lati	tud	le/Longitude	
Calegory	Category					End	
Item	Animal Co	ontrol		37.81279 <sup>2</sup>	ı °	37.812791	0
пеш				-121.336074	1°	-121.336074	0
DWR ID DWR_RD2062_03_s _ 2012_43							
	Action/Comments						

No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.

No Photos

LM Start	4.95	Rating **	М	Issue No.		35
LM End	4.95	Issue Type +	Ма	Location *		LS
Earthen Levee			GPS La	titud	le/Longitude	
Category				Start		End
Item	Erosion /	Bank Caving		37.8122	25 °	37.812225 °
item					12 °	-121.336112 °
DWR ID DWR_RD2062_03_f _ 2014_35						
Action/Comments						

Note and monitor erosion site.

Inspector Comments: 2 to 3 feet vertical cut possibly caused by previous floods.

# Photo 1 of 1 : FA\_2014\_RD2062\_311\_35\_20141001\_00020.jpg



View of a 2-3 feet vertical cut at the landside levee toe.

LM Start	5.45	Rating **	М	Issue No.		30		
LM End	5.45	Issue Type +	En	Location *		LS		
Supplemental				GPS Latitude/Longitude				
Category			Start		End			
Itom	DWR UCIP Field Study			37.8073	05 °	37.807305	0	
Item				-121.3312	90°	-121.331290	0	
DWR ID DWR_RD2062_03_f _ 2014_30								
Action/Comments								

Inspector Comments: FS\_ID:23142

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breakers not protected flow meter and gage station on waterside pump house on wooden pile structure.

Walkway to the pumphouse.

FIELD\_ŚTRUCT\_DESC: 1 of 2: Two 16-inch pipes through the levee 4.0 feet below the crown. Pump in the pump house on pile structure in the stream. Siphon breakers on the landward slope. Concrete

distribution box on landside berm.

FS Date: 10/22/2013

No	<b>Photos</b>

* Location	** Rating		+ Issue Type
LS : Land Side N/A : Not Applicable	A : Acceptable	N : Not Inspected/Rated	Ma : Maintenance Deficiancy
WS : Water Side	M : Minimally Acceptable	C : Corrected	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	A/W : Acceptable but Monitor & Maintain	En : Enforcement

# Levee Inspection Report By Mile - Fall 2014

# **Reclamation District No. 2062 Stewart**

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Old River	Left	5.55	11/21/2014 11/21/2014	Maksim Khashchuk

LM Start	5.45	Rating **	М	Issue No.	31		
LM End	5.45	Issue Type +	En	Location *	LS		
Supplemental				GPS Latitude/Longitude			
Category		Start		End			
Item	DWR UC	P Field Study		37.8073	)5 °	37.807305 °	
пеш				-121.3312	76 °	-121.331276 °	
DWR ID DWR_RD2062_03_f _ 2014_31							
Action/Comments							

Inspector Comments: FS\_ID:23140

EP\_NO: N/A

Repair Type: Non-Urgent Crossing Status: Found

UCIP Comments: - siphon breakers not protected flow meter and gage station on waterside pump house on wooden pile structure.

Walkway to the pumphouse.

FIELD\_STRUCT\_DESC: 2 of 2: Two 16-inch pipes through the levee 4.0 feet below the crown. Pump in the pump house on pile structure in the stream. Walkway to the pumphouse. Siphon breakers on the landward slope. Concrete distribution box on landside berm.

FS Date: 10/22/2013

No Photos

U : Unacceptable

N : Not Inspected/Rated C : Corrected

+ Issue Type

Ma : Maintenance Deficiancy
Ob : Design & System Obsolescence En: Enforcement

A/W : Acceptable but Monitor & Maintain